



AP 7/2006

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Patent Application No. 09/623,575

Applicant: OHMAE et al.

Filed: January 24, 2001

TC/AU: 2614

Examiner: J. Manning

Docket No.: 400830

Customer No.: 23548

APPELLANTS' AMENDED APPEAL BRIEF

U.S. Patent and Trademark Office
Customer Service Window, Mail Stop Appeal Brief - Patents
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Dear Sir:

In support of the appeal from the final rejection dated June 27, 2006, and in response to the Notice of Non-Compliant Appeal Brief mailed September 7, 2006, Appellants now submit their Amended Appeal Brief.

Real Party In Interest

The patent application that is the subject of this appeal is assigned to Businessbreakthrough Inc., of Tokyo, Japan.

Related Appeals and Interferences

There are no appeals, interferences, or judicial proceedings that are related to, may directly affect, be directly affected by, or have a bearing on the decision in this appeal.

Status of Claims

This patent application, a national phase of an international application, was filed with twenty-eight claims. However, in a Preliminary Amendment filed simultaneously with the patent application, claims 1-28 were replaced with claims 29-67. In the course of prosecution, claim 30 was cancelled and claims 68 and 69 were added so that claims 29 and 31-69 are now pending. No claim is allowed and the final rejection of all claims is appealed. The claims on appeal appear in the Claims Appendix.

Status of Amendments

No amendment was filed in response to the final rejection mailed March 27, 2006.

Summary of Claimed Subject Matter

The claimed subject matter of the present patent application relates to a remote educational system, meaning that the instructor and the student are at different locations. Most particularly, this remote education system emphasizes determining whether the student is attentive to the instructional program so that proper academic credit is granted or withheld depending upon the evidence of attentiveness acquired through the invention.

Of the thirty-nine finally rejected claims that are on appeal, fifteen are independent claims. These independent claims are directed to an audiovisual terminal, to a viewing authentication system, to a viewing authentication method, and to computer programs recorded in media for operating parts of the system, particularly the audiovisual terminals. While these claims are discussed in detail below, it is of assistance to describe, in a general way, the general features of the invention.

The invention relates to ensuring that persons viewing an audiovisual program, for which they may receive academic credit, are actually attentive to the audiovisual program. In order to confirm that attention, as each audiovisual program is presented, from time-to-time a viewing confirmation code is presented to the viewer. The viewer then enters, through some entry means of the apparatus supplying the audiovisual program, that same viewing confirmation code in order to confirm the viewing of the program. This response requires no thinking, no solution to a problem, no recall of facts, and no calculation. All that is required is entry of a viewing confirmation code identical

to the code viewing confirmation that is presented, so that any student can respond without difficulty.

When the viewer-entered viewing confirmation code is identical to the viewing confirmation code presented, and is entered at an acceptable time in relation to the presentation of the viewing confirmation code, attention to the program is confirmed. Entry of a different viewing confirmation code from the viewing confirmation code presented, failure to enter any viewing confirmation code, or failure to enter the correct viewing confirmation code at a proper time are considered to indicate inattentiveness. Of course, an inadvertent error in entering a viewing confirmation code might be counted as inattention. In aspects of the invention, an opportunity is presented to correct such an inadvertent error as to the viewer-entered viewing confirmation code and/or the timing of its entry. If the entered viewing confirmation code is not identical to the presented viewing confirmation code, but is in sufficient agreement with the presented viewing confirmation code, then the viewer is considered attentive. Likewise, some delay in response or the prompt correction of an incorrect viewer-entered code can be accepted to indicate attentiveness. Of course, the invention, as described in the patent application, contemplates the presentation to a viewer of multiple viewing confirmation codes at various times during an audiovisual program to determine continued attentiveness. (See Figures 8 and 11 of the patent application.)

There is no requirement that each subsequently presented viewing confirmation code be identical to the previously presented viewing confirmation code. The presentation of the viewing confirmation code and the responsive entry of a viewing confirmation code are illustrated in Figures 6-11 and described from page 26, line 25 to page 29, line 22 of the patent application. As pointed out in the patent application, the entry of the viewing confirmation code by the viewer may be made through a keyboard, a mouse, or another input device.

The invention also provides for detailed analysis of the code input by the viewer in determining the viewer's attentiveness. Considerations are given to the timing of the presentation of the viewing confirmation codes and the corresponding responses, any intervening delays, and like information in determining attentiveness.

Independent claims 29 and 43 are directed to audiovisual terminals. An example of an audiovisual terminal according to the invention is schematically illustrated as

element 30 of Figure 1. As explained in the patent application, that terminal may be a personal computer connected to some means of receiving and transmitting information. To the extent claim elements are described in “means plus function” format, those elements generally refer to computers or parts of computers, although that format does not exclude other alternative elements. For example, the transmitting means of claim 29 may refer to a modem within a computer, but the communication link between a principal providing an audiovisual program and a student receiving and viewing the program may include multiple links and various kinds of transmitting and receiving means. See, for example, Figure 12 of the patent application.

Referring to the described embodiment of the audiovisual terminal 30, that terminal includes an entry means 32, for example, a keyboard, mouse, touchpad, or other common input device, as described in the patent application at page 21, lines 2-4 and from page 22, line 19 through page 23, line 3. Those passages further describe the entry means of the audiovisual terminal as permitting the user of the terminal, referred to as a viewer, to enter a viewing confirmation code, upon the presentation of such a viewing confirmation code, in the course of viewing of an audiovisual program. The principal who supplies that audiovisual program uses the viewer input viewing confirmation code to determine whether the viewer of that program is attentive to the program. The presentation of the particular viewing confirmation codes is specific to a particular audiovisual program. In other words, different audiovisual programs supply different viewing confirmation codes at different times in the course of the programs, as explained in the patent application at pages 27-29 with respect to Figures 8 and 11. The audiovisual terminal also includes a transmitting means, element 34 in the embodiment of Figure 1, for transmitting to the principal who supplies the audiovisual program the viewing confirmation code that is entered by the viewer, along with time information that corresponds to the entry of the viewing confirmation code. The code and timing information are used to determine, as described in other claims, the attentiveness of the viewer.

Independent claim 43, likewise directed to an audiovisual terminal, includes the same entry means as the audiovisual terminal of claim 29. However, the audiovisual terminal of claim 43 also includes a means for storing, element 33 in the embodiment of Figure 1, such as a conventional memory. That storage means saves records of the

viewing confirmation code entered by the viewer as well as time information relating to that entry and to the presentation of the viewing confirmation code that triggers the response. The means for transmitting 34 within the audiovisual terminal of claim 43 provides to the principal, only after the ending of an audiovisual program, retrieval of the information from the storage means, i.e., the viewing confirmation codes and the associated time information as to presentation and entry of the responses. In other words, the audiovisual terminal of claim 29 may provide a real time response to the principal of the viewer-entered confirmation codes and associated times, whereas the audiovisual terminal of claim 43 waits until the end of an audiovisual program and then sends all of the confirmation code and timing information to the principal for after-the-fact analysis. These two different kinds of transmitting means and their functioning, in independent claims 29 and 43, are described in the patent application at page 23, lines 17-25. That passage even describes transmitting the viewing confirmation code and timing information with respect to the audiovisual terminal of claim 43 by post rather than by electronic means.

Independent claim 50 is directed to a viewing authentication system. Figure 3 illustrates an embodiment encompassed by claim 50.

The system according to claim 50 includes a means for receiving a viewing confirmation code, represented in the embodiment of Figure 1 by element 40, that has been presented to a viewer at a terminal. The viewer enters, as described previously, an identical viewing confirmation code to confirm that viewing is underway. The means for receiving is described in the patent application from page 24, lines 15-27. In addition, the viewing authentication system according to claim 50 includes a means for storing, corresponding to element 21 of the embodiment of Figure 3. That memory stores the viewing confirmation code as well as time information related to the time of presentation of the viewing confirmation code and a time interval between the time points of the presentation of the viewing confirmation code and the entry of a viewing confirmation code response by the viewer, i.e., the identical viewing confirmation code to confirmation to confirm attentiveness. This memory is described in the patent application at page 24, lines 24-27.

Independent claims 51, 53, 55, 57, 59, 61, and 63 are all directed to methods of determining whether viewing is occurring, i.e., attentiveness. However, those claims are

not identical. Those claims express different features of the claimed invention. Claim 51 is a basic method claim that describes supplying an audiovisual program, and presenting a viewing confirmation code to a viewer of the program at specific times with respect to a particular audiovisual program. These parts of the claimed method are supported in the patent application from page 22, line 7 through page 23, line 16. Further, as described in the patent application from page 23, line 26 through page 25, line 8, and particularly in the passage at page 24 in lines 15-27, the method according to claim 51 includes receiving from the audiovisual terminal where the program is being presented, the viewing confirmation code entered by a viewer and associated time information.

Finally, in the method according to claim 51, a determination is made as to whether the viewer is attentive to the audiovisual program by analyzing the viewing confirmation code received and the associated time information. This part of the method is described in the passage from page 25, line 15 through page 26, line 6. As in the other citations of portions of the specification, the portions of specification cited in this section are not the only portions of the specification supporting the respective claims. Rather, support for each of the claims is found at multiple locations throughout the specification.

Claim 53, the second method claim, includes the same features as claim 51 with regard to providing an audiovisual program and presenting viewing confirmation codes that are responded to by the viewer by entering identical viewing confirmation codes at particular times relative to the presentation of the viewing confirmation codes. The parts of claim 53 that are identical to claim 51 are supported by the same passages of the specification already cited.

In the method according to claim 53, the viewing confirmation code entered by a viewer and the associated time information are not immediately transmitted to the principal for a determination of viewing. Rather, that information is stored in the audiovisual terminal as described at page 23 in lines 4-16. Then, in this method, after the end of the audiovisual program the stored confirmation code and associated time information is supplied to the authenticating principal as described at page 23, line 28 through page 24, line 8. Thereafter, the determination is made, based upon the viewing confirmation code transmitted and the associated time information, as to whether the viewer has been viewing the program. See page 25, line 17 through page 26, line 6 of the patent application.

Claim 55, another independent method claim, includes the fundamental parts of claim 51 concerning the provision of an audiovisual program and its viewing, with the presentation of viewing confirmation codes and a response by entering of those viewing confirmation codes by the viewer, followed by transmission of the entered viewing confirmation codes and associated entry time information from the audiovisual terminal to the principal. Further, according to this method, an entry time interval between the time of presentation, i.e., display, of the viewing confirmation code and the entry of the responsive viewing confirmation code by the viewer is calculated. This feature is described in the patent application from page 24, line 28 through page 25, line 4 as well as in the passage from page 31, line 8 through page 32, line 16. The latter passage also supports the remainder of claim 55. In this method, the calculated time interval is compared with the time of presentation of the viewing confirmation code to the viewer.

The determination as to whether the viewer has been viewing the audiovisual program is made based on whether the entry time interval sufficiently agrees with the viewing confirmation code interval. The term “within a range” in claim 55 means that exact agreement between the intervals is not required to consider the viewer attentive, introducing some tolerance or acceptable delay with regard to the response, as described in the patent application from page 35, line 18 through page 36, line 16.

The basic elements of method claim 57 are the same as the basic elements of method claim 51. Those basic elements include providing an audiovisual program and presenting viewing confirmation codes to a viewer with the expectation that each time a viewing confirmation code is presented, the viewer responds with the same viewing confirmation code in order to prove attentiveness. In addition to those basic features, claim 57 provides for transmission of a viewing confirmation code that has been entered and the entry time point of that view confirmation code from the audiovisual terminal to the principal, as described in the patent application from page 38, line 24, through page 34, line 1.

In this method, a comparison is made between the entry time point of the viewing confirmation code transmitted with an elapsed time, based upon when the viewing confirmation code was presented. See the patent application at page 25, lines 5-16 and page 34, line 25 through page 36, line 16. A determination is made, based upon that comparison, as to whether the viewer is actually viewing the audiovisual program if the

time entry point of the code input by the viewer agrees with the elapsed time, within an established tolerance, i.e., the range referred to at the end of claim 57. Again, this comparison, including the margin of error permitted, is described in the patent application from page 35, line 18 through page 36, line 16.

Method claim 59, like many of the other method claims, includes the basic elements of independent claims 51 and 55 regarding the provision of an audiovisual program to a viewer, the presentation of a viewing confirmation code to the viewer, and the input by the viewer of the identical viewing confirmation code to establish attention to the program. Further, in the method of claim 59, the viewing confirmation code entered by the viewer and the entry time point of that entry is transmitted to the principal. Rather than immediately processing that information, the viewing confirmation code transmitted is stored in a file. A program authentication pattern relating to the audiovisual program is also stored. These respective storing steps, which allow analysis of the attentiveness of the viewer at a later time, are described in the patent application from page 33, line 20 through page 34, line 1 and at page 35, lines 3-14. A relatively extensive description of the remaining steps of claim 59 appears in subsequent pages of the patent application. In these latter steps, a comparison is made between the authentication pattern and the program authentication pattern. The results of that comparison are used to determine whether the viewer is attentive, which is confirmed if the two patterns correspond to each other.

In the method according to claim 61, the same fundamental elements of claim 51 are again provided. Those elements are the provision of an audiovisual program to a viewer with the presentation of a viewing confirmation code and the entry by the viewer each time a viewing confirmation code is presented, of that identical viewing confirmation code to confirm viewing. Further, at the principal, transmission of the viewing confirmation code entered by the viewer and an entry time interval, calculated from an entry time of that viewing confirmation code, is received, as described in the patent application from page 24, line 8 through page 25, line 4.

As described at page 25, lines 5-16, the entry time interval and a presented time interval of a respective viewing confirmation code are compared. Based upon that comparison, the determination is made that the viewer is attentive when there is agreement between the entry time interval and the presented interval. These features of

claim 61 are described in the patent application from page 31, line 8 through page 32, line 16 and from page 34, line 13 through page 36, line 16.

The viewing authenticating method of claim 63 includes the basic steps of the other method claims, namely providing an audiovisual program and presenting the viewing confirmation code, with the responsive entry by the viewer of the same viewing confirmation code to signify attentiveness. Further, the principal receives the viewing confirmation code entered by the viewer at an audiovisual terminal. As described at the passage from page 31, line 18 to page 32, line 16 of the patent application, comparison is made between the viewing confirmation code entered by the viewer and either a receipt time point, when the viewing confirmation code is received, or a time interval of the receipt time based upon that receipt time point, and a time interval of the viewing confirmation code. Based upon that comparison, attention of the viewer is confirmed if the receipt time point is in agreement with the presented time interval, as described in the patent application from page 34, line 13 through page 36, line 16.

Method claim 68 is similar to and supported by the same passages of the patent application as claim 55. However, in the method according to claim 55, a tolerance or margin of error is permitted with respect to the entry time interval, i.e., *when* a viewing confirmation code is entered. By contrast, in the method of claim 68, the margin of error that is permitted is with respect to *what* viewing confirmation code is entered. The same passage of the patent application at pages 35 and 36 describes this degree of tolerance between presented and input view confirmation codes as signifying attentiveness. In other words, if there are some disagreements between some of the characters of the viewing confirmation code received and the viewing confirmation code entered, the viewer may be credited with being attentive if there is agreement “within a range” of permissible error.

The final independent method claim, claim 69, is similar to claim 53, but permits, like the method of claim 68, a margin of error in the viewing confirmation code that is entered, in contrast to the time entry margin of error in some other claims. Again, this feature is supported in the description of the patent application at page 35 in lines 6-14. The other limitations of claim 69 are supported by and include the same basic features as claim 53.

Independent claims 65-67 are directed to computer programs recorded in a medium that is readable by the audiovisual terminal. Basically, the programs of claims 65-67 control the audiovisual terminals on which an audiovisual program is presented. Claims 65, 66, and 67 parallel claims 29, 43, and 43 respectively. Thus, those independent claims are considered to be counterparts of those two audiovisual terminal claims 29 and 43, and are supported by the same passages of the specification, already cited, that support those claims 29 and 43.

Grounds of Rejection to be reviewed on Appeal

Are any of claims 29 and 31-69 unpatentable, pursuant to 35 USC 103, over Lemelson et al. (U.S. Patent 5,823,788, hereinafter Lemelson) in view of Vogel (U.S. Patent 5,543,015), and further in view of Von Kohorn (U.S. Patent 5,249,044)?

Is Von Kohorn analogous prior art that can even be applied in rejecting any claim of this patent application pursuant to 35 USC 103?

Argument

Von Kohorn is Non-Analogous Art that cannot be applied in any rejection pursuant to 35 USC 103.

All pending claims are rejected as unpatentable pursuant to 35 USC 103 based upon the asserted combination of Lemelson, Vogel, and Von Kohorn.¹ Von Kohorn is essential to the rejection of every claim. However, Von Kohorn is not analogous art that can be applied in an obviousness rejection of any pending claim. Upon the withdrawal of Von Kohorn as prior art, the rejections of all claims must be reversed and no further consideration of any issue on appeal is necessary.

As conceded by the Examiner at page 3 of the final rejection, to be available for use in an obviousness rejection, a publication must either be in the same field as the inventor's endeavor or be reasonably pertinent to the problem with which the inventor was concerned. Otherwise, the publication is non-analogous art and may not be relied on in an obviousness rejection. See, MPEP 2141.01(a) and opinions cited there, particularly,

¹ Claim 37 is rejected in view of a fourth reference but stands or falls with claim 29.

In re Clay, 23 USPQ2d 1028 (Fed. Cir. 1992) and *In re Oetiker*, 24 USPQ2d 1443 (Fed. Cir. 1991). Von Kohorn meets neither of the alternative tests for analogous art and, therefore, must be withdrawn as a reference.

What Von Kohorn Discloses. U.S. Patent 5,249,044 to Von Kohorn describes a coupon generating system that is focused on a hand-held generating unit 14. That generating unit basically consists of a keyboard, a memory, and a printer. A display may also be present. The user receives the unit loaded with a special substrate, generally a roll of paper, that can be verified as genuine, from an authorized source. Then, the user of the unit 14 watches television to obtain information on products of interest. When a product of interest appears, information is supplied for input to the generating unit through the keyboard to print a product discount coupon that is redeemed in purchasing the product of interest. Among the information that may be obtained from the television is, in some instances, verification data that must be entered into the generating unit and recorded on a coupon that is printed to make the coupon usable or to qualify for a prize that might be awarded upon presentation or redemption of the coupon.

Why Von Kohorn is Non-Analogous Art. The field of endeavor of the present invention is remote education that is reliable in terms of attentiveness of a student. The field of Von Kohorn, according to its column 1, is the generation of tokens or product discount coupons by members of a broadcast audience located remotely from the source of the broadcast. Clearly the fields of endeavor of the invention and Von Kohorn are different.

The problem with which the invention is concerned, as stated at page 2 of the present patent application, is ensuring that students receiving educational audiovisual programs are actually attentive to them. While providing an examination concerning the course material at the end of such a course may measure knowledge regarding the course material, the examination results tell nothing about whether that knowledge came from another source, independent of attention or lack of attention to the remote-origin educational program.

Von Kohorn is not pertinent to the problem solved in the invention. Von Kohorn is directed to a low redemption rate of product discount coupons. The Von Kohorn response is to broadcast information about such coupons to potential shoppers, permitting the shoppers to select and print coupons only for products of potential interest. There is

no relationship between determining attentiveness of students and raising awareness of product discount coupons. Therefore, Von Kohorn fails both of the alternative analogous art tests, is not analogous art to the invention, and cannot be applied in an obviousness rejection of the pending claims.

The Examiner disagreed with the foregoing analysis of Von Kohorn. (See the final rejection at page 3.) However, the basis of the disagreement and which prong of the analogous art tests Von Kohorn is alleged to meet is not stated in the final rejection.

“Von Kohorn discloses an interactive television broadcast system (Col 3, Lines 32-38 and 53-59). This disclosed generating unit 14 is an element in the disclosed interactive system. It is the Examiners position that one of ordinary skill in the art would have recognized the advantage of using identical verification codes (the codes presented to the user and subsequently entered by the user) in order to prevent cheating in the educational system taught by Lemelson (see Col 5, Lines 52-67; Col 6, Lines 1-4; Col 6, Lines 23-45 of Von Kohorn).”

The foregoing comment does not allege that Von Kohorn is within the field of endeavor of the invention or is pertinent to the problem with which the invention is concerned. Rather, as best understood, the statement in the cited passage is that if Von Kohorn were used to modify Lemelson, then *prima facie* obviousness would be established with respect to some unspecified claims. This implicit conclusion begs the question as to whether Von Kohorn is even available to suggest any modification of Lemelson. The Examiner has failed to establish that Von Kohorn is analogous prior art that can be used in rejecting any of the claims on appeal.

Von Kohorn should be withdrawn as a reference, with the result that the rejections of all claims would have to be reversed because the Examiner has already acknowledged that his hypothetical modification of Lemelson with Vogel is insufficient to establish *prima facie* obviousness of any pending claim.

While a decision that Von Kohorn is not analogous art terminates any need for further deliberation with respect to the issues on appeal, Appellants address those other issues below in the event the Board should conclude that Von Kohorn is analogous prior art.

What Lemelson Discloses. U.S. Patent 5,823,788 to Lemelson concerns an instructional system in which there is real-time interaction between a teacher or lecturer,

and students who are attending the lecture either at the lecture site or remotely. From time-to-time the teacher or one of his confederates, during the lecture, poses questions to the students through terminals employed by the students. The students then provide answers to the questions that are posed. The answers that are supplied are collected at a central station and are evaluated by the teacher or another person. The information derived from the answers supplied by the students is employed by the instructor, either directly or after statistical analysis, to alter the course of the lecture. The information derived from the answers supplied by the students is an indication of how well the students have comprehended the instructional material. The lecturer can thereby determine whether to increase or decrease the speed of the lecture or alter the way information is being presented in order to tailor the course, continuously, to the learning abilities and success of the students.

An essential feature of the Lemelson system is the presentation of substantive questions to the students and the analysis of substantive responses. See the Abstract and Summary sections of Lemelson. While all of the specification of Lemelson is important to understanding what is disclosed there, attention is specifically directed to the passage from column 2, line 47 through column 3, line 19. The cited portions of Lemelson demonstrate that the essence of the Lemelson system is the provision to the students of substantive questions and substantive responses. Lemelson even mentions the presentation of essay questions and responses. See column 5, lines 34-39. If, in response to a question, a student merely reproduces, in the response, the question, then the response and the entire Lemelson system are useless. That response is not only the wrong answer, it is no answer.

What Vogel Discloses. U.S. Patent 5,453,015 to Vogel describes a system including terminals for input of answers to questions, including pressing an appropriate button on the terminal or by writing an answer on a card mounted on the terminal. Vogel describes supplying these terminals to audience members of a quiz show. The audience members may be remotely located, playing the quiz game simultaneously via a television broadcast. Because the answer to a question is ultimately disclosed in the quiz show or might be found by research, rather than knowledge, the time for answering by an audience member is limited to avoid cheating. So many variations are proposed by Vogel that they cannot be succinctly described.

In some embodiments described in Vogel, the time of entering an answer is recorded and in other embodiments a fixed time window is established for entering answers. The times of entry of answers, at least in the former embodiment, are recorded. The recorded answers and the time entry information, in at least one version of Vogel, are communicated to a central location for scoring of results, including the discarding of untimely responses. The communication to the central location may be by physically surrendering the terminal or by telecommunication.

Response to Prior Art Rejections.

Since the prior art rejections of all independent claims are founded on the modification of Lemelson with Vogel and Von Kohorn, the rejections are initially responded to generally. Thereafter, a claim-by-claim response is provided.

Prima Facie Obviousness, pursuant to 35 USC 103 has not been established as to any of claims 29 and 31-69 even when considered together.

In the invention, a viewer of an audiovisual program is, from time-to-time, requested to enter a presented viewing confirmation code. To confirm viewing of the program, the viewing confirmation code entered must be identical to (or within a range of agreement with) the viewing confirmation code presented. All of the pending claims, claim 29 and 31-69, require a function of an audiovisual terminal or a step of a method that is, essentially, each time a viewing confirmation code is presented to the viewer, a viewing confirmation code identical (or nearly identical) to the viewing confirmation code presented be entered to confirm viewing of the audiovisual program, with the viewing confirmation code entered being transmitted to a principal who authenticates viewing of the audiovisual program being presented.

The Examiner analogized the question and answer feature of Lemelson to the viewing confirmation code feature of the claimed invention. However, there is no proper analogy. In Lemelson a substantive question is presented and a substantive answer is expected. Even if the answer to the question is selected from a group of proposed answers, i.e., is a multiple-choice question, or if the answer is simply a "yes" or "no", the

answer is clearly different from the question. If the presentation of the viewing confirmation code in the invention is considered to be a question, then the correct “answer” is the question, i.e., entry of an identical reproduction of the viewing confirmation code presented. Lemelson never discloses such an arrangement and cannot even suggest such an arrangement because it would be contrary to the intended and desired operation of the Lemelson system. If, in the Lemelson system, all of the answers received were identical to the questions, the lecturer in Lemelson could gather no information as to how well the material being presented was being comprehended and could not determine whether to make some adjustment in the presentation of that material. In other words, Lemelson teaches away from the claimed invention.

Vogel does not supply the viewing confirmation code presentation and entering feature of the invention that is missing from Lemelson. In fact, Vogel was not cited as potentially supplying that feature. Instead, Vogel was cited as allegedly supplying various timing features that are part of some, but not all, of the claims. Therefore, it is conceded that no combination of Vogel and Lemelson can provide an important feature of the invention, namely supplying, in response to a presented viewing code, that same viewing code to a principal to verify attentiveness.

Von Kohorn, if analogous art, cannot fill the acknowledged gap between the claimed invention and the purported combination of Lemelson and Vogel. According to the description of Von Kohorn that appears at page 4, and elsewhere, in the final rejection, “Von Kohorn teaches a viewing code that is identical to the viewing code where the code is transmitted after the presentation of the program so as to act as a safeguard against cheating.” This statement is neither understood nor correct. Of course the “viewing code”, if there were one, in Von Kohorn, would be, by definition, identical to itself. In the invention, the important identity is between the viewing confirmation code presented and the viewing confirmation code input by the person paying attention to the audiovisual presentation and that is returned to the presenting principal. The broadcast in Von Kohorn clearly transmits coupon data during the broadcast, not after the broadcast. The coupon data is the broadcast. The basis of applying Von Kohorn cannot be understood and is erroneous.

The only candidate for a viewing confirmation code in Von Kohorn is the verification data supplied in a broadcast that must be entered by a user of the Von Kohorn

system into the generating unit 14 for recordation on a coupon. That recorded information is never returned to the broadcaster via any medium. Rather, according to Von Kohorn, this verification data or indicia is used to award a prize or a discount. See Von Kohorn from column 5, line 60 through column 6, line 4. While the term “verification” is used in that passage of Von Kohorn and in the cited paragraph appearing in column 6 beginning in line 23 of Von Kohorn, the reference is to counterfeiting, not attentiveness.

Even if it considered that Von Kohorn’s verification data or other product data obtained by watching television is a “viewing code” that can only be obtained by watching, there is still no description in Von Kohorn of inputting that information each time it appears, as there is in the invention for the viewing confirmation code, to indicate attentiveness. In fact, the whole purpose of Von Kohorn is to permit the watcher to input, selectively, to the coupon generating unit 14 only those product codes and verification data that pertain to particular products of interest, ignoring similar information that pertains to products of no interest. Thus, Von Kohorn really teaches against the important aspect of the invention in which each time a viewing confirmation code appears, that viewing confirmation code must be input to confirm viewing.

Moreover, Von Kohorn’s generating unit does not transmit the “viewing code” to the source of the “viewing code”, which might be analogized to the principal of the invention.

“The system and method described above has the advantage that the generating unit 14 need not be programmed or controlled by external sources such as by electronic signals. The only electronic communication flow is from the central location to the TV-viewers, and the only information input into the generating unit is that entered by a TV-viewer on the input keys 20 or other entry device. The absence of two way communication significantly reduces capital investment and operating costs of the system.” (Von Kohorn, column 6, lines 46-53.)²

Therefore, there is no description, and clearly no suggestion, in Von Kohorn for receipt of a “viewing code” by a viewer and entry and re-transmission of the identical “viewing code” to the broadcaster to indicate attentiveness to the broadcast. The contrary

² Von Kohorn permits two-way communication for requesting the broadcaster to display information about a specific product. However, Von Kohorn provides no means for responding to the broadcaster in any way. See, Von Kohorn at column 6, lines 55-61.

assertion can only have been reached with knowledge of the invention, not the prior art. Since the assertion is critical to the rejection of all pending claims, the rejection is erroneous.

It follows from the foregoing descriptions of Vogel and Von Kohorn that neither Vogel nor Von Kohorn can suggest modification of Lemelson to send back to the lecturer a code identical to the code sent by the lecturer and thereby suggest that aspect of the invention. In other words, even if Von Kohorn were used to modify Lemelson and Vogel, *prima facie* obviousness could still not be established as to any of claims 29 and 31-69.

The foregoing distinguishing explanation applies to every pending independent claim and, therefore, to every pending claim, i.e., claims 29 and 31-69. The explanation demonstrates that *prima facie* obviousness has not been established with respect to any pending claim, even if it is assumed that Von Kohorn is analogous prior art. Each claim includes a fundamental description of presenting to the viewer of an audiovisual program a viewing confirmation code that is responded to, if attentiveness of the viewer is to be confirmed, with the identical viewing confirmation code that is supplied by an authenticating principal that uses the information to determine the attentiveness of the viewer.

Prima Facie Obviousness, pursuant to 35 USC 103 has not been established as to any of claims 29 and 31-69 when considered in separate claim groups.

As already described, in addition to the generic feature of the invention which appears in every pending claim, respective groups of independent claims and respective independent claims, as argued below, include further limitations that provide additional distinctions between the invention and the properly applied prior art, namely Lemelson and Vogel, and, for the purposes of this portion of the argument, Von Kohorn. Those additional distinguishing features are described in the following paragraphs in view of the length and apparent detail of the final rejection. It is unnecessary to resort to the limitations of the dependent claims to distinguish the invention from the asserted prior art and those claims stand or fall with their respective independent parent claims.

Audiovisual Terminal Claims 29 and 31-49 and Computer Program Claims 65-67 are not obvious over Lemelson, Vogel, and Von Kohorn pursuant to 35 USC 103.

Independent claim 29. Independent claim 29, directed to an audiovisual terminal, is one of the broadest pending claims. Therefore, the generic argument presented above is particularly applicable to that claim and demonstrates its distinction from the references applied in the final rejection. In explaining the specific application of Lemelson to claim 29, at pages 4 and 5 of the final rejection, the Examiner erroneously compared the substantive answer supplied by a student in Lemelson to the viewing confirmation code of the invention and claim. The distinction between the non-substantive response of the invention and the essential nature of a substantive response in Lemelson has already been discussed.

The Examiner further referred to the passage in claim 29 regarding the presentation of the viewing confirmation code by a program-providing principal “at a time specific to the audiovisual program”. This description clearly means that a respective audiovisual program has its own, respective viewing confirmation codes. The Examiner asserted that this limitation is met in Lemelson by Figure 8 and the passage at column 13, lines 47-52. See the final rejection at pages 4 and 5. This comparison is erroneous and has confused the presentation of the viewing confirmation code to the viewer, specific to a particular program, in the invention with timing of a response to the presented viewing confirmation code. The quotation that partly appears on the first two lines of page 5 of the final rejection, referring to the timing of *a response* by a student in Lemelson, makes clear that the cited passage of Lemelson cannot, as asserted in the final rejection, meet the cited claim limitation. That limitation concerns the *presentation* of the viewing confirmation code, which the Examiner analogizes to a question, to the student, not the response. The failure of the asserted part of Lemelson to meet the language of the claim demonstrates further error in the rejection of that claim and its dependent claims.

Independent claim 43. Independent claim 43, also directed to an audiovisual terminal, includes an entry means described identically to the entry means of claim 29. The rejection with regard to these two identical limitations in the final rejection identically appears in the final rejection. Compare pages 4 and 5 to pages 13 and 14 of the final rejection. Similarly, an identical argument appears with respect to the alleged

identify of the viewing confirmation code with respect to claims 43 and 29. Thus, the arguments presented in the foregoing paragraphs as to why claim 29 distinguishes in these aspects from the prior art is equally applicable to claim 43 and is not duplicated, but is asserted by reference against the rejection of claim 43.

Claim 43 differs in several respects from claim 29, including the provision of a means for transmitting, after the ending of an audiovisual program, the stored viewing confirmation code and respective time information based upon the entries by the viewer. Apparently it is asserted that Lemelson in its Figures 3 and 7 meets the limitation of claim 43 with regard to the “means for transmitting”. See the final rejection at page 14 in lines 8-14. However, the description there relates to the microprocessor 40 in Lemelson that is within the apparatus relating to the teacher, not with respect to the student or viewer. There is no description in the cited portion of Lemelson, or in the final rejection, that suggests a means for transmitting the stored viewer entered data after the ending of an audiovisual program. Further, there can be no description or suggestion of such a feature in Lemelson because it is essential in Lemelson that the teacher receive “real time” feedback in order alter the course of the teaching to meet the progress or lack of progress of the students. See Lemelson at column 3, lines 1-19. Because of this additional difference from the prior art, *prima facie* obviousness has not been established with respect to claim 43 and its dependent claims.

As previously stated, Appellants rely upon the arguments presented with regard to claims 29 and 43 concerning audiovisual terminals for the patentability of independent claims 65-67 directed to computer programs.

Authentication System Claim 50 is not obvious over Lemelson, Vogel, and Von Kohorn pursuant to 35 USC 103.

Independent claim 50. Claim 50 is an independent claim directed to a viewing authentication system which, as previously discussed, describes elements on the side of the principal supplying the audiovisual program. The system includes means for receiving, from the terminal where the program is being viewed, the viewing confirmation code entered by the viewer. Further, at the principal’s side, the system includes means for storing the code that was received at the viewing terminal as well as a

time point corresponding to the entry of the viewing confirmation code by the viewer and a time interval related to the presentation of each code and the responsive entry. As explained in the patent application, that information stored on the side of the principal is employed in the analysis of the stored information to determine the viewer's attentiveness.

At page 20 of the final rejection, the Examiner responded to claim 50 by stating that its limitations "are met by that discussed above for claims 29 and 43." That response is inadequate because what is claimed in claims 29 and 43 relates to the terminals where the program is viewed not the system of authentication where viewing attentiveness is determined. In other words, there can have been no specific response to the limitations of claim 50 in the final rejection of claims 29 and 43. The response with regard to claims 29 and 43 was directed to an aspect of the invention different from claim 50. To the extent claim 50 stands rejected, Appellants respond not only with the generic distinction presented above as to all claims but also, to the extent applicable, the foregoing comments regarding the final rejection of claims 29 and 43. For example, the asserted references do not, for the reasons presented multiple times, describe a system in which attentiveness is measured by supplying, from time-to-time, a viewing confirmation code with a desired response consisting of the identical viewing confirmation code.

Method Claims 51-64, 68, and 69 are not obvious over Lemelson, Vogel, and Von Kohorn pursuant to 35 USC 103.

All of the independent method claims, claims 51, 53, 55, 57, 59, 61, 63, 68, and 69, include the provision of a viewing confirmation code to a viewer. Entry, in response, of the identical viewing confirmation code, if viewing of the audiovisual program is to be confirmed, is necessary. For the reasons already presented numerous times, this feature is not in any combination of Lemelson, Vogel, or Von Kohorn, contrary to the reiterated argument appearing at pages 20-22, 24, 25 of the final rejection with respect to claims 51, 53, and 55. No separate recitation of this ground of rejection appears in the final rejection for the other independent method claims. For the same reasons presented generically as

to all claims, independent method claims 51, 53, 55, 57, 59, 61, 63, 68, and 69, are patentably distinct from the applied references.

Each of the independent method claims explicitly includes a step of determining whether the viewer is viewing the audiovisual program. The determination is made, explicitly or implicitly, based upon a match, or near match, between the viewing confirmation code entered by the viewer and the viewing confirmation code presented. Independent claims 51, 53, 68, and 69 explicitly require that match or near match. The other independent method claims, claims 55, 57, 59, 61, and 63, explicitly require a matching of certain time-related tests, as expressly stated in those claims.

In the final rejection, the determining step of each of the independent method claims was asserted to have been met, at least with respect to claims 51, 53, and 55, by Vogel. There was no explanation as to how the prior art meets that step in independent claim 59 and, at best, some kind of incorporation by reference with respect to the final rejection of claims 57, 61, 63, 68, and 69 as to this feature. See the final rejection at page 28, lines 1 and 2 and pages 28 and 29 with respect to claim 59.

None of the three publications applied in the rejections of the independent claims describes any step of or any reason for any step of determining whether a person is attentive to the activity underway. Although only Vogel was relied upon as supplying a step of determining whether a particular viewer is paying attention, it is apparent that there is no such step in Lemelson or Von Kohorn. Lemelson presumes that each student is paying attention to the lecture and poses questions only to determine the progress of the student. It is assumed that every student answers and Lemelson provides particular measures to ensure that all the answers are received. See Lemelson beginning at column 7, line 59. Lemelson provides no measure or technique for dealing with a failure of a student to respond and therefore cannot provide the “determining step” of the method claims, as conceded in the final rejection.

Von Kohorn provides no technique for determining whether a potential viewer of a program concerning coupon generation is actually launching. In fact, by providing for only selective input of coupon information into the generating unit 14, the Von Kohorn system waives any possibility of tracking attentiveness of users of its system. As with Lemelson, the failure to rely upon Von Kohorn with respect to the step of determining

whether a viewer is paying attention is a concession that this step is absent from Von Kohorn.

The numerous arrangements described in Vogel for scoring the accuracy and timeliness of answers to quiz show contestants does not measure or determine attentiveness. Failure to pay attention is indistinguishable from a wrong or untimely answer. Therefore, Vogel never measures, nor ever suggests measuring, attentiveness of a game participant by, for example, calculating the percentage of questions responded to without regard to timeliness or accuracy of the answers to substantive questions. Some similarity may be found between some of the limitations of some of the independent method claims regarding timeliness of responses and timeliness as measured in Vogel. However, that similarity does not provide a disclosure nor suggestion within Vogel for determining attentiveness of a participant, i.e., whether a participant is at any given time actually watching or engaging in a quiz program.

Since each of the three patents relied upon as allegedly disclosing the “determining” step of each of the independent method claims fails to disclose or even suggest that step, *prima facie* obviousness of all of the pending method claims has not been established. For this generic reason, applicable to all pending method claims, the rejections of those claims should be reversed.

Independent claims 68 and 69. Independent method claims 68 and 69 are similar to claims 53 and 55 but include an important difference never addressed in any Office Action. Claims 68 and 69 specify that viewing confirmation can be established when the viewing confirmation code entered by the viewer is not identical to, but is close to, i.e., within a range of tolerance to, the viewing confirmation code presented. There is not even an allegation within the final rejection that this claim limitation is disclosed anywhere within the three publications applied in rejecting those two independent claims.

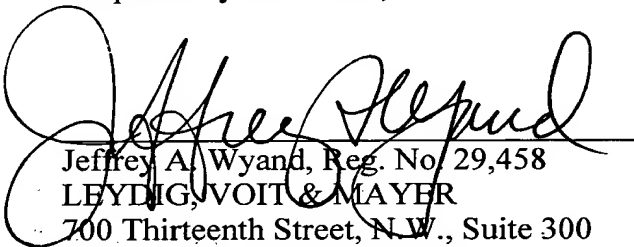
The absence of such an assertion further confirms that *prima facie* obviousness has not been established with respect to independent method claims 68 and 69. Only a single reference to those claims appears in the final rejection. At page 28, the final rejection asserts that these claims are met by the discussion in the final rejection with respect to claims 51, 53, and 55. However, the code mismatch tolerance just described is absent from any of those claims, demonstrating the failure of the final rejection as to claims 68 and 69. *Prima facie* obviousness of these claims has not been established based on the

generic argument as to all claims, the generic argument as to the method claims, and the failure to identify in the prior art all of the elements of claims 68 and 69. The rejection of these claims must be reversed.

Summary

For the reasons extensively presented, *prima facie* obviousness has not been established with regard to any pending claim. Thus, the rejection of the independent claims and, therefore, of the dependent claims, must be reversed.

Respectfully submitted,


Jeffrey A. Wyand, Reg. No. 29,458
LEYDIG, VOIT & MAYER
700 Thirteenth Street, N.W., Suite 300
Washington, DC 20005-3960
(202) 737-6770 (telephone)
(202) 737-6776 (facsimile)

Date: Sept 25, 2006
JAW:ves

Claims Appendix

29. An audiovisual terminal comprising:

entry means through which a viewer of an audiovisual program enters a viewing confirmation code, for the audiovisual program, each time a viewing confirmation code is presented to the viewer, the viewing confirmation code to be entered being identical to the viewing confirmation code presented to confirm viewing of the audiovisual program, the viewing confirmation code entered being transmitted to a principal who authenticates viewing of the audiovisual program, the confirmation viewing code being presented by a program-providing principal at a time specific to the audiovisual program; and

transmitting means for transmitting to the principal, who authenticates viewing of the audiovisual program, the viewing confirmation code entered and time information corresponding to the viewing confirmation code, for comparing the time information with the time specific to the audiovisual program.

31. The audiovisual terminal as recited in claim 29, wherein the entry means includes an input interface of a computer, and the time information corresponding to the viewing confirmation code is obtained from a clock function of the computer.

32. The audiovisual terminal as recited in claim 29, wherein the audiovisual program is a broadcast program.

33. The audiovisual terminal as recited in claim 29, wherein the transmitting means transmits the viewing confirmation code after the audiovisual program is over.

34. The audiovisual terminal as recited in claim 33, wherein transmission by the transmitting means is made through a computer-readable medium.

35. The audiovisual terminal as recited in claim 29, wherein the transmitting means transmits the viewing confirmation code at any time during of the audiovisual program.

36. The audiovisual terminal as recited in claim 29, wherein the audiovisual program is provided through a reproducible medium.

37. The audiovisual terminal as recited in claim 36, wherein, if reproduction of the reproducible medium is interrupted temporarily, the transmitting means transmits a medium interruption code.

38. The audiovisual terminal as recited in claim 29, further comprising code presenting means for presenting the viewing confirmation code for the audiovisual program.

39. A viewing authentication system, wherein time information corresponding to a viewing confirmation code is a time point of entering the viewing confirmation code, the system comprising:

means for calculating an entry time interval of the viewing confirmation code from the entry time point transmitted from the audiovisual terminal as recited in claim 29;

means for comparing the entry time interval calculated by the means for calculating with a presentation interval of the viewing confirmation code presented on the audiovisual terminal; and

means for determining that the viewer is viewing a respective broadcast program if the entry time interval is in agreement with the presentation interval, within a range.

40. A viewing authentication system comprising:

means for comparing an entry time point of a viewing confirmation code transmitted from the audiovisual terminal as recited in claim 29, with an elapsed time from a base time, of the viewing confirmation code presented on the audiovisual terminal; and

means for determining, from the means for comparing, that the viewer is viewing a respective broadcast program if an entry time point is in agreement with the elapsed time, within a range.

41. A viewing authentication system comprising:

a program viewing result file for storing a viewing confirmation code transmitted from the audiovisual terminal as recited in claim 29;

program authentication pattern storage means for storing a program authentication pattern presented on the audiovisual terminal;

means for comparing the viewing confirmation code stored in the program viewing result file with a program authentication pattern corresponding to the viewing confirmation code and stored in the program authentication pattern storage means; and

means for determining, from the means for comparing, that the viewer is viewing a respective broadcast program if the viewing confirmation code stored is in agreement with the program authentication pattern corresponding to the viewing confirmation code.

42. A viewing authentication system wherein time information corresponding to a viewing confirmation code is a time interval for entering the viewing confirmation code, the system comprising:

means for comparing an entry time interval transmitted from the audiovisual terminal as recited in claim 29, with a presentation interval of the viewing confirmation code presented on the audiovisual terminal; and

means for determining, from the means for comparing, that the viewer is viewing a respective broadcast program if the entry time interval is in agreement with the presentation interval, within a range.

43. An audiovisual terminal comprising:

entry means through which a viewer of an audiovisual program enters a viewing confirmation code, for the audiovisual program, each time a viewing confirmation code is presented to the viewer, the viewing confirmation code to be entered being identical to the viewing confirmation code presented to confirm viewing of the audiovisual program, the viewing confirmation code entered being transmitted to a principal who authenticates viewing of the audiovisual program, the confirmation viewing code being presented by a program-providing principal at a time specific to the audiovisual program;

means for storing the viewing confirmation code entered and time information corresponding to presentation and entry of the viewing confirmation code, the time information being comparable to the times specific to the audiovisual program; and

means for transmitting, after ending of the audiovisual program, from the means for storing, the viewing confirmation code and the time information corresponding to the viewing confirmation code, to the principal.

44. The audiovisual terminal as recited in claim 43, further comprising code presenting means for presenting the viewing confirmation code for the audiovisual program.

45. A viewing authentication system, wherein time information corresponding to a viewing confirmation code is a time point of entering the viewing confirmation code, the system comprising:

means for calculating an entry time interval of the viewing confirmation code from an entry time point transmitted from the audiovisual terminal as recited in claim 43;

means for comparing the entry time interval calculated by the means for calculating with a presentation interval of the viewing confirmation code presented on the audiovisual terminal; and

means for determining that the viewer is viewing a respective broadcast program if the entry time interval is in agreement with the presentation interval, within a range.

46. The viewing authentication system as recited in claim 45, wherein the means for determining scores based on a comparison carried out by the means for comparing.

47. A viewing authentication system comprising:

means for comparing an entry time point of a viewing confirmation code transmitted from the audiovisual terminal as recited in claim 43, with an elapsed time from a base time, of the viewing confirmation code presented on the audiovisual terminal; and

means for determining, from the means for comparing, that the viewer is viewing a respective broadcast program if an entry time point is in agreement with the elapsed time, within a range.

48. A viewing authentication system comprising:

a program viewing result file for storing a viewing confirmation code transmitted from the audiovisual terminal as recited in claim 43;

program authentication pattern storage means for storing a program authentication pattern presented on the audiovisual terminal;

means for comparing the viewing confirmation code stored in the program viewing result file with a program authentication pattern corresponding to the viewing confirmation code and stored in the program authentication pattern storage means; and

means for determining, from the means for comparing, that the viewer is viewing a respective broadcast program if the viewing confirmation code stored is in agreement with the program authentication pattern corresponding to the viewing confirmation code.

49. A viewing authentication system wherein time information corresponding to a viewing confirmation code is a time interval for entering the viewing confirmation code, the system comprising:

means for comparing an entry time interval transmitted from the audiovisual terminal as recited in claim 43, with a presentation interval of the viewing confirmation code presented on the audiovisual terminal; and

means for determining, from the means for comparing, that the viewer is viewing a respective broadcast program if the entry time interval is in agreement with the presentation interval, within a range.

50. A viewing authentication system comprising:

means for receiving transmission of a viewing confirmation code for a presented audiovisual program, the viewing confirmation code being presented to a viewer at a terminal on a viewer side, the terminal being used for viewing the presented audiovisual program, the viewer entering into the terminal, each time a viewing confirmation code is presented to the viewer by a program-providing principal, a viewing confirmation code

that is identical to the viewing confirmation code presented to confirm viewing of the presented audiovisual program; and

means for storing the viewing confirmation code received at the terminal and one of a time point corresponding to entry of the viewing confirmation code by the viewer and a time interval between time points when the viewing confirmation code is received at the terminal and entry of a viewing confirmation code by the viewer, wherein the viewing confirmation code is presented with a timing specific to the presented audiovisual program for determining whether the viewer is viewing the presented audiovisual program, based on the viewing confirmation code stored and the one of the time point and the time interval that is stored.

51. A method of authenticating viewing of an audiovisual program comprising:
providing an audiovisual program;

presenting a viewing confirmation code for the audiovisual program to a viewer of the audiovisual program, the viewing confirmation code being presented at a time specific to the audiovisual program, wherein, each time a viewing confirmation code is presented to the viewer, the viewer enters into an audiovisual terminal a viewing confirmation code that is identical to the viewing confirmation code presented to confirm viewing of the audiovisual program;

receiving from the audiovisual terminal a transmission with respect to the viewing confirmation code entered and time information corresponding to the viewing confirmation code entered; and

determining whether the viewer is viewing the audiovisual program based upon the viewing confirmation code received and the time information.

52. A remote education method wherein,
audiovisual programs for education are provided to learners; and
viewing by the learners is authenticated with the viewing authentication method as recited in claim 51.

53. A method of authenticating viewing of an audiovisual program comprising:
providing an audiovisual program;

presenting a viewing confirmation code for the audiovisual program to a viewer of the audiovisual program, the viewing confirmation code being presented at a time specific to the audiovisual program, wherein, each time a viewing confirmation code is presented to the viewer, the viewer enters into an audiovisual terminal a viewing confirmation code that is identical to the viewing confirmation code presented to confirm viewing of the audiovisual program, and the viewing confirmation code entered and time information corresponding thereto are stored in the audiovisual terminal;

receiving the viewing confirmation code stored and the time information corresponding thereto transmitted from the audiovisual terminal after ending of the audiovisual program; and

determining whether the viewer is viewing the audiovisual program based upon the viewing confirmation code received and the time information.

54. A remote education method wherein, audiovisual programs for education are provided to learners; and viewing by the learners is authenticated with the viewing authentication method as recited in claim 53.

55. A method of authenticating viewing of an audiovisual program comprising: providing an audiovisual program; presenting a viewing confirmation code for the audiovisual program to a viewer of the audiovisual program, the viewing confirmation code being presented at a time specific to the audiovisual program, wherein, each time a viewing confirmation code is presented to the viewer, the viewer enters into an audiovisual terminal a viewing confirmation code that is identical to the viewing confirmation code presented to confirm viewing of the audiovisual program;

receiving a transmission with respect to the viewing confirmation code entered and an entry time point of the viewing confirmation code from the audiovisual terminal;

calculating an entry time interval of the viewing confirmation code from the entry time point transmitted from the audiovisual terminal;

comparing the entry time interval calculated with a presented interval of the viewing confirmation code; and

determining that the viewer is viewing the audiovisual program if the entry time interval is in agreement with the interval of the viewing confirmation code, within a range.

56. A remote education method wherein,
audiovisual programs for education are provided to learners; and
viewing by the learners is authenticated with the viewing authentication method as recited in claim 55.

57. A method of authenticating viewing of an audiovisual program comprising:
providing an audiovisual program;
presenting a viewing confirmation code for the audiovisual program to a viewer of the audiovisual program, the viewing confirmation code being presented at a time specific to the audiovisual program, wherein, each time a viewing confirmation code is presented to the viewer, the viewer enters into an audiovisual terminal a viewing confirmation code that is identical to the viewing confirmation code presented to confirm viewing of the audiovisual program and the time has a specific relationship to a base time;
receiving a transmission with respect to the viewing confirmation code entered and an entry time point of the viewing confirmation code from the audiovisual terminal;
comparing the entry time point of the viewing confirmation codes transmitted with an elapsed time from the base time of the viewing confirmation code presented; and
determining, from the comparing, that the viewer is viewing the audiovisual program if the entry time point is in agreement with the elapsed time, within a range.

58. A remote education method wherein,
audiovisual programs for education are provided to learners; and
viewing by the learners is authenticated with the viewing authentication method as recited in claim 57.

59. A method of authenticating viewing of an audiovisual program comprising:
providing an audiovisual program;

presenting a viewing confirmation code for the audiovisual program to a viewer of the audiovisual program, the viewing confirmation code being presented at a time specific to the audiovisual program, wherein, each time a viewing confirmation code is presented to the viewer, the viewer enters into an audiovisual terminal a viewing confirmation code that is identical to the viewing confirmation code presented to confirm viewing of the audiovisual program;

receiving a transmission with respect to the viewing confirmation code entered and an entry time point of the viewing confirmation code from the audiovisual terminal;

storing the viewing confirmation code transmitted in a program viewing result file;

storing a program authentication pattern formed by the viewing confirmation code presented in program authentication pattern storage means;

comparing the authentication pattern formed by the viewing confirmation code stored in the program viewing result file with the program authentication pattern stored in the program authentication pattern storage means; and

determining, from the comparing, that the viewer is viewing the audiovisual program if the authentication pattern formed by the viewing confirmation code stored in the program viewing result file is in agreement with the program authentication pattern corresponding to the viewing confirmation code.

60. A remote education method wherein,
audiovisual programs for education are provided to learners; and
viewing by the learners is authenticated with the viewing authentication method as recited in claim 59.

61. A method of authenticating viewing of an audiovisual program comprising:
providing an audiovisual program;

presenting a viewing confirmation code for the audiovisual program to a viewer of the audiovisual program, the viewing confirmation code being presented at a time specific to the audiovisual program, wherein, each time a viewing confirmation code is presented to the viewer, the viewer enters into an audiovisual terminal a viewing confirmation code that is identical to the viewing confirmation code presented to confirm viewing of the audiovisual program;

receiving a transmission with respect to the viewing confirmation code entered and an entry time interval of the viewing confirmation code calculated based on an entry time point of the viewing confirmation code from the audiovisual terminal;

comparing the entry time interval transmitted and a presented time interval of the viewing confirmation code presented; and

determining, from the comparing, that the viewer is viewing the audiovisual program if the entry time interval is in agreement with the presented interval.

62. A remote education method wherein,
the audiovisual programs is one for education provided to learners; and
the viewing by the learners is authenticated with the viewing authentication method as recited in claim 61.

63. A method of authenticating viewing of an audiovisual program comprising:
providing an audiovisual program;
presenting a viewing confirmation code for the audiovisual program to a viewer of the audiovisual program, the viewing confirmation code being presented at a time specific to the audiovisual program, wherein, each time a viewing confirmation code is presented to the viewer, the viewer enters into an audiovisual terminal a viewing confirmation code that is identical to the viewing confirmation code presented to confirm viewing of the audiovisual program;

receiving the confirmation code entered from the audiovisual terminal;

comparing the viewing confirmation code received and one of a receipt time point of the viewing confirmation code and a time interval of a receipt time, calculated based on the receipt time point of the viewing confirmation code, with a presented time interval of the viewing confirmation code presented; and

determining, from the comparing, that the viewer is viewing the audiovisual program if the receipt time point is in agreement with the presented time interval.

64. A remote education method wherein,
the audiovisual programs is one for education provided to learners; and

the viewing by the learners is authenticated with the viewing authentication method as recited in claim 63.

65. A recording medium readable with an audiovisual terminal and having a program stored thereon for controlling the audiovisual terminal to receive, in the audiovisual terminal, a presented viewing confirmation code for a respective audiovisual program, each time a viewing confirmation code is presented by a program-providing principal, and a viewing confirmation code entered by a viewer of the audiovisual program each time a viewing confirmation code is presented, for confirming viewing of the audiovisual program when the presented viewing confirmation code and the viewing confirmation code entered are identical, for transmission to a viewing authentication principal, and to transmit from the audiovisual terminal the viewing confirmation code received and time information corresponding to the viewing confirmation code to the viewing authentication principal.

66. A recording medium readable with an audiovisual terminal and having a program stored thereon for controlling the audiovisual terminal to receive, in the audiovisual terminal, a presented viewing confirmation code for a respective audiovisual program, each time a viewing confirmation code is presented by a program-providing principal, and a viewing confirmation code entered by a viewer of the audiovisual program each time a viewing confirmation code is presented, for confirming viewing of the audiovisual program when the presented viewing confirmation code and the viewing confirmation code entered are identical, for transmission from the audiovisual terminal to a viewing authentication principal, to store the viewing confirmation code entered and time information corresponding to the viewing confirmation code entered, and to transmit the viewing confirmation code entered to the viewing authenticating principal.

67. A recording medium readable with an audiovisual terminal and having a program stored thereon for controlling the audiovisual terminal to receive, in the audiovisual terminal, a presented viewing confirmation code for a respective audiovisual program, each time a viewing confirmation code is presented by a program-providing principal, and a viewing confirmation code entered by a viewer of the audiovisual

program each time a viewing confirmation code is presented, for confirming viewing of the audiovisual program when the presented viewing confirmation code and the viewing confirmation code entered are identical, for transmission from the audiovisual terminal to a viewing authentication principal, and to transmit the viewing confirmation code entered to the viewing authentication principal.

68. A method of authenticating viewing of an audiovisual program comprising:
providing an audiovisual program to a viewer;

presenting a viewing confirmation code for the audiovisual program to the viewer of the audiovisual program, wherein, each time a viewing confirmation code is presented to the viewer, the viewer enters into an audiovisual terminal a viewing confirmation code that is identical to the viewing confirmation code presented to confirming viewing of the audiovisual program;

receiving from the audiovisual terminal a transmission with respect to the viewing confirmation code entered; and

determining that the viewer is viewing the audiovisual program if the viewing confirmation code received is not identical to but is in agreement with the viewing confirmation code presented, within a range.

69. A method of authenticating viewing of an audiovisual program comprising:
providing an audiovisual program to a viewer;

presenting a viewing confirmation code for the audiovisual program to the viewer of the audiovisual program, wherein, each time a viewing confirmation code is presented to the viewer, the viewer enters into an audiovisual terminal a viewing confirmation code that is identical to the viewing confirmation code presented to confirm viewing of the audiovisual program, and the viewing confirmation code entered is stored in the audiovisual terminal;

receiving the viewing confirmation code stored from the audiovisual terminal after ending of the audiovisual program; and

determining that the viewer is viewing the audiovisual program if the viewing confirmation code received is not identical to but is in agreement with the viewing confirmation code presented, within a range.

Evidence Appendix

No evidence was presented in the prosecution of the claims of this patent application.

Application No. 09/623,575

Appeal Brief

Related Proceedings Appendix

There are no related proceedings.